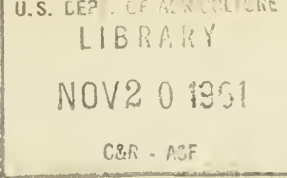


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GRAZING MANAGEMENT NEEDED AFTER ACCIDENTAL BURNS
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Farmers' Bulletin No. 1948 "Sagebrush Burning--Good and Bad" contains information regarding the grazing management of burned areas that is likely to be extremely helpful in handling range lands that have been accidentally burned.

It points out that improper grazing after burning is more frequently responsible for soil loss and damage to the plant cover than is the burning itself. One example cited in the bulletin showed that improper grazing after burning was primarily responsible for preventing a substantial increase in grazing capacity; allowed serious damage to all grasses and a complete kill of some less fire-resistant species; and permitted the return of 50 percent more sagebrush plants than in the original unburned stand and serious soil loss and damage to soil fertility.

On the other hand where grazing was correctly handled after burning, grazing capacity was increased by 83 percent; most species of grass increased in abundance, none were killed even though they were not fire-resistant; less than four sagebrush plants per 100 square feet had returned on areas where 35 plants per 100 square feet were in the original dense stand; and soil loss or damage was negligible.

Had these burned areas been on sloping national forest lands it is likely the contrast between them would have been even more pronounced, especially in soil erosion.

The bulletin makes three fundamental suggestions to be observed in grazing newly burned ranges:

1. Avoid the trailing of livestock across newly burned areas during at least the first fall. Trailing across the burned areas during the first fall stirs up the unprotected dry soil and speeds up erosion by wind and water. Livestock also bring in sagebrush seeds in their fleece or hair, and scatter them over the burned range. Young sagebrush seedlings that come up early the first spring will be firmly established before perennial grasses and weeds have recovered sufficiently to retard the coming in of new sagebrush plants. Trailing may thus be largely responsible for reoccupation by sagebrush.

2. Avoid grazing for 1 full year after burning. Forage grazed during the first year can be taken only with the chance of serious damage to soil and to desirable plants. Grazing the scattered growth of perennials that occasionally comes in on the newly burned range after early fall rains is also likely to allow the loss of soil and permit the return of sagebrush as well as cause marked injury to perennials so grazed off.

In the next spring the reduced vigor of forage plants caused by fire is easily overlooked as all grasses and weeds on the range are in full view at one time. There appears to be a great abundance of green feed. Actually, burning has weakened all of the desirable plants, some of them seriously. Grazing soon after the fire is certain to utilize the more palatable species rather heavily and further reduce them in vigor, prevent their increase in size or abundance, or even kill them. In these circumstances, sagebrush can successfully reoccupy the area. Furthermore, grazing the sparse plant cover stirs up the inadequately protected soil and may speed wind and water erosion.

3. Graze lightly the second year and moderately thereafter. It is advisable to avoid further injury to plants that may at the end of the first year still be suffering from burning. Since the second year after fire is generally a year of heavy seed production, light grazing affords an opportunity for the more desirable species to increase in number.

As is pointed out in the bulletin, if grazing is properly managed afterward, even accidental burns may produce good results on ranges on which conditions are otherwise favorable to burning. On the other hand, improper grazing will tend to increase erosion or to damage the plant cover on accidentally burned ranges that have steep slopes. This is also true on ranges that have soils which are likely to wash or blow, or that have an inadequate understory of grasses or an understory composed largely of plants which are easily injured by fire.

Many accidental burns occur on range land supporting insufficient native grass to assure recovery of desirable vegetation for forage and soil protection. On these it is often desirable and in some cases imperative that seedings be made. Such seedings should be made as soon after the burns as practical in order that the more desirable species can get well started before debilitating competition from cheatgrass begins.

It may not always be possible to follow completely all of these suggestions, but by being aware of the hazards and by acquainting the permittee with the dangers of improper grazing after burning, range managers may be able to enlist his cooperation in properly handling areas that have been accidentally burned. Damage from accidental burns may be thereby minimized. On ranges clothed with dense sagebrush an accidental burn may be used to bring about range improvement.